NEHA SUNIL

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EDUCATION

CALTECH | 2015 – 2019
Pasadena, CA | G.P.A. 3.9
- B.S. Mechanical Engineering
    - Depth in Robotics, Breadth in Medical Engineering & Design

COURSES
- Core Courses in Math, Physics, Chemistry, and Computer Science
- ME/CS 133: Robotics, ME 72: Engineering Design Laboratory, ME 50: Experiments & Modeling in Mechanical Engineering, EE/ME 7: Mechatronics, ME 13: Mechanical Prototyping, ME 14: Design & Fabrication
- ME 11: Thermal Science & Fluid Dynamics, ME 12: Mechanics
- Bi 1x: Exploration through Experimentation, Bi 23: Nanorobotics, CNS 100: Intro to Computation and Neural Systems, CNS/Bi 256: Decision Making, MedE 101: Intro to Clinical Physiology and Pathophysiology for Engineers

THE HARKER SCHOOL | 2011 – 2015
San Jose, CA | G.P.A. 4.48

EXPERIENCE

MECHANICAL ENGINEERING INTERN | June 2017 – September 2017
Nima Labs | Startup developing portable food allergen sensors
- Redesigned multi-channel version of camera-based consumer device in aluminum for reliability and mitigation of user error
- Created manufacturing drawings and exploded assembly drawings. Worked with vendors and wrote up resource document for internal use

ENGINEERING INTERN | June 2016 – September 2016
Nima Labs
- Collaborated with hardware and chemistry teams
- Tested multi-channel version of device and discovered key variables of interest affecting chemistry development and camera readings
- Analyzed capabilities of product's camera

COMPUTATIONAL GENOMICS INTERN | June 2014 – August 2014
Stanford University
- Created a tool in R to select RNA guides to create library for a novel genome-editing technique using CRISPRs

RESEARCH EXPERIENCE

Bi 1x: Exploration through Experimentation | 2016
- o Used image processing (through scikit-image in Python), brightfield & fluorescence microscopy, and optogenetics

Harker Labs | 2009 – 2014
- o Experienced with ELISA assays, gel electrophoresis, statistical data analysis and visualization, principal component analysis

SKILLS

PROGRAMMING
- o Experienced in Java, C, R, Python, Mathematica, MATLAB
- o Familiar with D3.js, HTML, UML, VB, Arduino

APPLICATIONS
- o Solidworks (DFM, Metal part design, Top-down modeling)
- o Microsoft Office, Excel (Visual Basic), Google Forms
- o Adobe: Photoshop, InDesign
- o Final Cut Pro (Video Editor)
- o Aurasma (Augmented Reality App)

ACHIEVEMENTS
- o Certified Yoga Instructor with 500+ hours of teaching experience
- o 2nd Degree Black Belt in Taekwondo
- o Successful Aging Mini-Fellowship: Stanford School of Medicine | 2015
- o America Library of Poetry Publication | 2015
- o Scholastic Art & Writing Award (Photography) | 2015
- o National Scholastic Press Association Journalism Honor Roll | 2015
- o Presidential Volunteer Service Award | 2013